

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
10 March 2005 (10.03.2005)

PCT

(10) International Publication Number
WO 2005/021607 A1

- (51) International Patent Classification⁷: **C08F 8/46**, 110/06
- (74) Agent: **SCHALKWIJK, Pieter, Cornelis**; Akzo Nobel N.V., Intellectual Property Department (Dept. AIP), P.O. Box 9300, NL-6800 SB Arnhem (NL).
- (21) International Application Number: PCT/EP2004/009297
- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 18 August 2004 (18.08.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
03077671.0 27 August 2003 (27.08.2003) EP
60/506,286 26 September 2003 (26.09.2003) US
- (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (*for all designated States except US*): **FLEXSYS B.V.** [NL/NL]; Zutphenseweg 10, NL-7418 AJ Deventer (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **OLDE HANTER, Lambertus, Gerhardus, Johannus** [NL/NL]; Lemseloschoolweg 11, NL-7595 ME Weerselo (NL). **EISENHUTH, Ludwig** [DE/DE]; Lauterhofstrasse 44, 63785 Obernburg (DE). **DE HOOG, Arie, Jacob** [NL/NL]; Bouwhofweg 35, NL-7339 HB Ugchelen (NL). **SCHNEIDER, Peter** [DE/DE]; Sandstrasse 24, 46446 Emmerich (DE). **MASLOW, Wasil** [NL/NL]; Emmastraat 30, 7411 EK Deventer (NL).
- Published:
— with international search report
— with amended claims
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: PROCESS FOR ENHANCING THE MELT STRENGTH OF POLYPROPYLENE

(57) Abstract: The invention relates to a process for enhancing the melt strength of polypropylene comprising the steps of: mixing the polypropylene with at least 0.1-8 wt.% of an oligomer of maleimide or a derivative thereof, based on the amount of polypropylene, completely or substantially in the absence of peroxide; reacting said polypropylene and oligomer of maleimide or a derivative thereof at a temperature between 150 °C and 300 °C.